THE PRO-POORNESS OF THE FERTILIZER SUBSIDY AND ITS IMPLICATIONS FOR FOOD SECURITY IN NIGERIA

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The fertilizer subsidy in Nigeria aims at making the fertilizer price affordable by smallholder farmers in order to increase agricultural productivity and its efficiency, thereby increasing the income of the farmers and reducing poverty and food insecurity in the country. However, the past Nigerian Government fertilizer subsidy programmes have been characterized by a high level of policy inconsistencies, ambiguities and instabilities; all this has led to arguments regarding its basis, application, impacts and sustainability (IDEP, 2011). Akinwumi Adesina¹ (2013), at that time agriculture minister of Nigeria, pointed out that the old fertilizer scheme used in supplying inputs to the farmers was weak, inefficient and fraudulent, and hence a large proportion of the farmers could not benefit from it. He stressed that the inputs meant for the farmers were diverted by political elites to other countries for personal gains. He concluded that the gains of the old fertilizer subsidy schemes are also not widely spread among the targeted beneficiaries. An attempt to overcome these difficulties led to the introduction of the Growth Enhancement Support Scheme (GESS)² and to the use of the Electronic Wallet (e-wallet) Approach³ to distribute fertilizer to the farmers.

It is expedient to ask questions on the e-wallet fertilizer subsidy scheme performance based on the objectives of the scheme. The major questions are to which extent the scheme has increased the fertilizer use and to which extent the food crop productivity was affected among the participating farmers? These questions are relevant because they will have implications on the sustainability of the scheme and its ability to improve the food security situation in Nigeria. Furthermore, the empirical answers to some of these questions and the salient lessons derived from this study will help in re-designing and implementing the scheme in Nigeria and of similar schemes in other African countries. This study will provide the Nigerian government with feedback required for adjustments in input subsidy policies and of public spending policies for agriculture in Nigeria. Therefore, the impacts of the e-wallet fertilizer subsidy scheme on the quantity of fertilizer use, on the food crop output and on the yields of crops matter in Nigeria. The study made use of the Nigeria General Household

¹ He is now the 8th President of the African Development Bank (AfDB): https://www.afdb.org/en/about-us/organisational-structure/the-president/

² Evaluations were done on the impacts of GESS: https://www.researchgate.net/publication/316969261_Impact_of_the_Growth_Enhancement_Support_Scheme_GESS_on_Farmers%27_Income_in_Oyo_State_Nigeria

Survey (GHS)-Panel Datasets of 2010/2011 and 2012/2013 which contain data on 5,000 farmers in each of the panel. Applied is propensity score matching (PSM) to analyse the data. It was found that the e-wallet fertilizer scheme was able to register about 70\% of the expected registered farmers, while the roll-out and redemption rates stood at 55\% and 48\% respectively. Generally, the concentration indices of the fertilizer subsidy before and during the e-wallet fertilizer scheme were 0.0328 and 0.0168 respectively. The estimated concentration index of 0.0168 implies that the share of the small-scale farmers (poor farmers) in the e-wallet fertilizer scheme is lower than the share of the large-scale farmers (non-poor farmers) compared with the situation before. The study showed further that the share of the rural areas in the fertilizer subsidy was about 39\% and 41\% before and during the e-wallet scheme respectively. The study also revealed that the participating farmers in the e-wallet fertilizer scheme used more fertilizer and had higher output and yield than the non-participating farmers.

The study concluded that, although the e-wallet fertilizer scheme has achieved the objective of increased fertilizer use and increases of the productivity of the farmers, its benefits are concentrated on non-poor farmers. In order to improve the impact of the scheme on food crop productivity and on food security in Nigeria, the study recommends how the impact of the scheme can be improved and be made more pro-poor.

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